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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,883	09/10/2003	Shao-Pin Ru	T-1256	5014
802	7590	11/23/2005		
DELLETT & WALTERS P. O. BOX 82788 PORTLAND, OR 97282-0788			EXAMINER CHANG, RICK KILTAE	
			ART UNIT 3729	PAPER NUMBER
DATE MAILED: 11/23/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Claim Objections

1. Claim 6 is objected to as being a substantial duplicate of claim 5. Claim 6 and claim 5 are essentially duplicates of one another or else are so close in content that they both cover the same thing, despite a slight difference in wording. It is improper to have two claims which contain the same limitations, in the same application as one claim would be a substantial duplicate of the other claim.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 5-6 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Ito et al (US 6,938,336).

Ito discloses forming through holes formed in a ceramic substrate 1; forming copper or silver material pillars 6; 3 and 16 are copper; 14 is an insulating layer.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 3729

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (US 6,938,336) in view of Official Notice.

Ito fails to disclose forming holes using laser beams or a photolithography technology and lines are titanium.

Official Notice is taken that it is well known in the art to forming holes using laser beams or a photolithography technology and the conductive lines are titanium to form fine and intricate through holes and providing good conductive material for electrical and mechanical purposes.

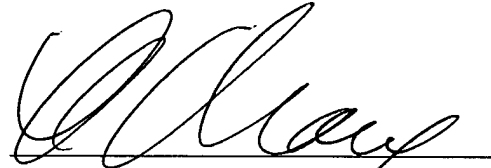
Conclusion

6. **Please provide reference numerals (either in parentheses next to the claimed limitation or in a table format with one column listing the claimed limitation and another column listing corresponding reference numerals in the remark section of the response to the Office Action) to all the claimed limitations as well as support in the disclosure for better clarity (optional). Applicants are duly reminded that a full and proper response to this Office Action that includes any amendment to the claims and specification of the application as originally filed requires that the applicant point out the support for any amendment made to the disclosure, including the claims. See 37 CFR 1.111 and MPEP 2163.06.**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick K. Chang whose telephone number is (571) 272-4564. The examiner can normally be reached on 5:30 AM to 1:30 PM, Monday through Thursday.

Art Unit: 3729

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.


A handwritten signature in black ink, appearing to read 'Richard Chang', is written over a horizontal line. Below the line, the name and title are printed in a bold, sans-serif font.

RICHARD CHANG
PRIMARY EXAMINER

RC

November 22, 2005